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SCIENCE

A WEEKLY JOURNAL DEVOTED TO THE ADVANCEMENT OF SCIENCE.

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Published by

THE MACMILLAN COMPANY, 66 Fifth Ave., New York.

TO OUR READERS.*

THE experience of centuries shows that great success in advancing scientific knowledge cannot be expected even from the most gifted men, so long as they remain isolated. The attrition of like minds is almost as necessary to intellectual production as companionship is to conversation. The commencement of the development of science on a large scale, and with brilliant success, was coeval with the formation of the Royal Society of London and the Academy of Sciences of France. When these bodies came together their members began to talk and to think.

At the present day one of the aspects of American science which most strikes us is the comparative deficiency of the social element. We have indeed numerous local scientific societies, many of which are meeting with marked success. But these bodies cannot supply the want of national coöperation and communication. The field of each is necessarily limited, and its activities confined to its own neighborhood. We need a broader sympathy and easier communication between widely separated men in every part of the country. Our journal aims to

*From the Introduction to the new series of SCIENCE by Professor Newcomb.

supply the want of such a medium, and asks the aid of all concerned in making its efforts successful. It will have little space for technicalities which interest only the specialist of each class, and will occupy itself mostly with those broader aspects of thought and culture which are of interest not only to scientific investigators, but to educated men of every profession. A specialist of one department may know little more of the work of a specialist in another department than does the general reader. Hence, by appealing to the interests of the latter, we do not neglect those of the scientific profession. At the same time, it is intended that the journal shall be much more than a medium for the popularization of science. Underlying the process of specialization, which is so prominent a feature of all the knowledge of our time, there is now to be seen a tendency toward unification, a development of principles which connect a constantly increasing number of special branches. The meeting of all students of nature in a single field thus becomes more and more feasible, and in promoting intercourse among all such students SCIENCE hopes to find a field for its energies, in which it may invite the support of all who sympathize with its aim.

An Advertisement of Science.

When SCIENCE was established, in 1883, it was at once accepted as the organ of American men of science. Edited by Mr. S. H. Scudder, it early numbered among its contributors nearly all the leading scientific men of the country. The officers and directors of the JOURNAL were: President D. C. Gilman, *President*; Professor Simon Newcomb, *Vice-President*; Hon. Gardiner G. Hubbard, Professor Alexander Graham Bell, Professor O. C. Marsh, Major J. W. Powell, Professor W. P. Trowbridge and Mr. S. H. Scudder.

The sum of eighty thousand dollars was spent in the establishment and support of SCIENCE by Professor A. Graham Bell and the late Mr. Gardiner G. Hubbard. Large as the sum may appear, it is small in comparison with the value of the JOURNAL to science in America.

SCIENCE was reorganized three years ago, and has since been under the charge of an editorial committee, consisting of the leading men of science of America. It has, during this period, adequately and fully reflected the progress of science and has been an important factor in its advancement. Its contents have maintained a high and even standard, comparing favorably with any journal in any country. It has stimulated scientific activity and interest in America, and has led to a fuller recognition of American science abroad.

SCIENCE aims to give each week just what everyone interested in the advancement of science should read. There are articles and addresses, often by our leading students of science, and always by the most competent writers. These do not conflict with the contents of the special journals, but offer the information and stimulus needed by those who wish to keep abreast of modern science. For example, SCIENCE published an account, by Lord Rayleigh, of the discovery of argon; the first English announcement of *Pithecanthropus erectus*,

by Professor Brinton; the first English description of Professor Röntgen's discovery, by Professor Münsterberg, together with the American researches on the subject by Professors Rood, Mayer, Pupin and others; the announcement, by Professors Langley and Bell, of the successful trial of the aërodrome; an article, the best hitherto written, on Acetelene, by President Crafts. The most important recent biological advance, organic selection, was first announced and discussed in SCIENCE by Professors Baldwin, Osborn, Lloyd Morgan and Poulton. Addresses and articles have been contributed by Professor Newcomb, Lord Kelvin, Lord Lister, Professor Foster, President Mendenhall, Mr. Gilbert, Mr. Scudder, Professors Gibbs, Marsh, Remsen, Bowditch, Minot, Brooks, Le Conte, Billings, and the leaders in all departments of science, including Goode, Cope, Allen and others no longer living.

All matters relating to the organization of science, associations, academies and societies, journals, universities, museums and other institutions, both here and abroad, the scientific departments under the government, legislation and related subjects have been fully reported and discussed in SCIENCE. Thus, for example: The American Association for the Advancement of Science, the National Academy of Sciences, the various national societies devoted to a special science, the State and local academies and societies, have had their proceedings reported, and not by writers for the press, but by officers of the societies. SCIENCE has published the report of the Forestry Commission of the National Academy of Sciences, the legislation on standards and on the metric system, the official report in defense of vivisection, plans for the reorganization of the scientific departments under the government, and many similar documents. On scientific education contributions have been made by President Jordan, Professors Bessey, Shaler, Coulter, Carhart, Freer, Gage and others equally competent. Editorial articles and

The first series of Science.

The new series of Science.

Organization of Science.

Original Contributions.

notes have been prepared, whenever it was thought that the weight of the JOURNAL should be used for the defense and advancement of scientific interests.

SCIENCE publishes in every issue articles on the progress of science. Sometimes these are announcements of new advances, but nearly always of a character to make them intelligible and interesting to those having no special knowledge of the subject. More frequently, they are reports of work, the details of which are published elsewhere, or reviews of the general advance in some department of science. It would be impossible to mention, within the limits of this advertisement, all those who have made such contributions. They include men of science from practically every university and institution in America showing scientific activity. There is further given, weekly, a series of notes by the most competent authorities, reviewing important scientific advances. The notes contributed by Professors Brinton, Davis, Bessey, Osborn, Howe, Frost and others are of unusual value to those who wish to keep informed on the progress of science. Each week pages of items of scientific news are published, which alone would make it essential for everyone to read the JOURNAL who wishes to keep informed on current scientific interests and activity.

Scientific books are reviewed weekly in SCIENCE, the most recent information and authoritative estimate of new publications being given. It is probable that no journal in America is able to publish reviews of such weight as those contributed to SCIENCE. While the special journals may give information regarding

new publications in a single science, it is necessary for everyone to know something of the more important books in other sciences, and for this purpose SCIENCE is essential. Some notice is also given of the contents of special journals and other smaller contributions which might otherwise escape attention.

The weekly appearance of SCIENCE, the wide fields it covers, and the fact that it is read by practically everyone interested in scientific matters, makes it the best medium for discussion and correspondence. This has been generally recognized and the department usually contains contributions of great interest tending to promote acquaintance and intercourse between men of science. This department alone is of sufficient importance to warrant the continuation and success of the JOURNAL.

The past history of SCIENCE is a sufficient guarantee of its future usefulness. Such a JOURNAL is essential to the advance and proper recognition of the scientific work of each country, and in America, where men of science are scattered over a great area, with no single center for personal intercourse, it is peculiarly needful. With the growth of science and scientific institutions in America, SCIENCE will occupy an even more important position than at present. It will continue to set a standard to the popular press in its treatment of scientific topics, to secure that general interest in science so essential to its material support, to enlarge the place of science in education and in life, and to demonstrate and increase the unity of sciences and the common interests of men of science.

Progress of Science.

Discussion.

The future of SCIENCE.

Scientific Lit- erature.

SCIENCE is a public institution as much as is a university, a museum, or an academy. It was established at great expense, as a gift to American scientific men. Its editors receive no compensation for their services. The receipts are spent in improving a JOURNAL that is essential to the advancement and proper recognition of science in America. All who are interested in the advancement and diffusion of science can assist the JOURNAL in the following ways:

(1) By subscribing to it. The 2,000 large pages annually published, are worth far more than the cost of the JOURNAL, not only to professional students, but also to physicians, clergymen, lawyers, men of business and others who wish to keep informed on the progress of science.

(2) By giving SCIENCE as a present where it will exert an influence beneficial to the recipient, or to the increase of interest in science. The publishers can supply the names of Young Men's Christian Associations and other libraries anxious to receive SCIENCE, but unable to afford the subscription.

(3) By seeing that SCIENCE is received by all educational institutions, libraries, laboratories, etc, where it would be useful. It is true that the presence of SCIENCE in hundreds of libraries interferes somewhat with individual subscriptions, but it is important that its influence be made as wide as possible. At the same time it is hoped that those who can afford to subscribe to SCIENCE will not depend on a library for the reading of a JOURNAL whose contents are of permanent value.

(4) By purchasing from advertisers in SCIENCE when this can be done to the best advantage, and by seeing that scientific books, instruments, institutions, etc., are advertised in SCIENCE. It is evident that an advertisement in SCIENCE is seen by more scientific men than if inserted in twenty daily papers, and insisting on this fact to publishers, makers of instruments, etc., would help the JOURNAL.

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